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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,822	01/20/2004	Robert D. Porter	RDP-3	8304

7590 10/29/2004
Henry W. Cummings
3313 W. Adams St.
St. Charles, MO 63301

EXAMINER

COHEN, AMY R

ART UNIT PAPER NUMBER

2859

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,822

Applicant(s)

PORTER, ROBERT D.

Examiner

Amy R Cohen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities:

The "Brief description of the drawings" section is missing from the specification.

Appropriate correction is required.

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3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the groove claimed in claim 2 is shown in the figures, however, there is no assigned reference number and there is no discussion in the specification.

Claim Objections

4. Claims 1, 4, 7, 8, 12, 16 are objected to because of the following informalities:

Applicant is reminded that all claims should be in one sentence form, therefore, the independent claims should be amended to be of only one sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hanson (U. S. Patent No. 1,588,361).

Hanson teaches a thread ring gage testing and setting device (Fig. 1) comprising: a threaded outer portion (11) for testing a thread ring gage; a first non-threaded cylindrical portion (13) of smaller diameter than said outer portion located inwardly from said threaded outer portion (Fig. 1); and a second non-threaded cylindrical portion of larger diameter than said first non-threaded cylindrical portion (Fig. 1, where b' is pointing, would be numbered 13', but is not

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numbered) located inwardly from said first non threaded cylindrical portion to test for a thread ring gage over size minor diameter (Fig. 1).

Hanson teaches the thread ring gauge testing device wherein a groove (16, 17) is provided between the first non-threaded cylindrical portion and the second non-threaded cylindrical portion (Fig. 1).

Hanson teaches a thread ring gage testing device comprising: a treaded outer portion (11) at one end for testing a "GO" thread ring gage; a first non threaded cylindrical portion (13) of a smaller diameter than said outer portion located inwardly from said threaded outer portion; a second non-threaded cylindrical portion (Fig. 1, outer portion of 10, between 13 and c) of a larger diameter than said first non-threaded cylindrical portion located inwardly from said first non-threaded cylindrical portion; a second threaded outer portion (11') located at a second end for testing a "NO GO" thread ring gage; a third non-threaded cylindrical portion of smaller diameter than said second threaded outer portion (Fig. 1, where b' is pointing, would be numbered 13', but is not numbered); and a fourth non-threaded cylindrical portion located inwardly from said third non-threaded cylindrical portion (Fig. 1, outer portion of 10', between 13' and c').

Hanson teaches the thread ring gage testing device wherein a groove is provided between said first non-threaded cylindrical portion and said second non-threaded cylindrical portion (Fig. 1, the groove is considered the area where threaded part 12 begins), and between said third non-threaded cylindrical portion and said fourth non-threaded cylindrical portion (Fig. 1, the groove is considered the area where threaded part 12' begins).

Regarding claims 1, and 4: it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed

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apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, to test for a thread ring gage undersize effective minor diameter and to test for a thread ring gage over size minor diameter is considered intended use of the device.

7. Claims 1, 2, 7, 8, 12-14, 16-18, and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomson (U. S. Patent No. 1,954,852).

Thomson teaches a thread ring gage testing and setting device (Fig. 1) comprising: a threaded outer portion (16) for testing a thread ring gage; a first non-threaded cylindrical portion (15) of smaller diameter than said outer portion located inwardly from said threaded outer portion to test for a thread ring gage undersize effective minor diameter; and a second non-threaded cylindrical portion (18) of larger diameter than said first non-threaded cylindrical portion located inwardly from said first non-threaded cylindrical portion to test for a thread ring gage over size minor diameter (Col 2, lines 73-97).

Thomson teaches the thread ring gage testing device wherein a groove (the groove is before thread 20, Fig. 4) is provided between first non-threaded cylindrical portion and said second non-threaded cylindrical portion.

Thomson teaches an improved thread ring gage testing device for testing "GO" and "NO GO" thread ring gages comprising: longitudinally spaced effective minor diameter cylindrical checking sections (15, 18) located respectively in the approximate center of the respective "GO" and "NO GO" gage portions; longitudinally spaced front threaded sections (16, 19) having pitch diameters formed to the lower limit of the thread ring gage pitch diameter tolerance; and longitudinally spaced back truncated thread sections (17, 20) formed to the upper limit of the thread ring gage pitch diameter tolerance of said gage.

Thomson teaches a method of testing a thread ring gage comprising; providing a thread ring gage to be tested for tolerance compliance; providing a thread setting plug gage; adjusting said thread ring gage to fit on a first full threaded section of said plug gage; advancing said thread ring gage toward a first cylindrical section of said setting gage; determining whether said thread ring gage clears said first cylindrical section of said setting gage, which represents the minimum acceptable effective minor diameter; advancing said thread ring gage further toward a second, larger diameter plain cylindrical section; determining if said ring gage stops at said second, larger diameter plain cylindrical section; which represents the upper size limit for the minor diameter of said ring gage; advancing said thread ring gage in the opposite direction toward a truncated section located at a front portion of said setting gage; and determining whether or not there is a change in the fit of said ring gage on said truncated section (Col 2, lines 64-96, Col 3, lines 14-72).

Thomson teaches an improved thread ring gage testing device for testing "GO" and "NO GO" thread ring gages comprising: a threaded portion (16) for testing a thread ring gage; a first non-threaded cylindrical portion of smaller diameter (11) located outwardly from said threaded portion to test for a thread ring gage undersize effective minor diameter, and; a second non-threaded cylindrical portion (15) of a larger diameter than said first non-threaded cylindrical portion located inwardly from said threaded portion to test for a thread ring gage oversize minor diameter (Fig. 1).

Thomson teaches the thread ring gage testing device wherein a starting chamfer (the end of 11) is provided on the outward end of first non-threaded cylindrical portion to facilitate assembly with the thread ring gage (Fig. 1).

Thomson teaches the thread ring gage testing device wherein a groove (13) is provided between first non-threaded cylindrical portion and said threaded portion.

Thomson teaches a thread ring gage testing device comprising: a threaded outer portion (16) at one end for testing a "GO" thread ring gage; a first non-threaded cylindrical portion (11) of smaller diameter than said outer portion located outwardly from said threaded outer portion to test for a thread ring gage undersize effective minor diameter; and a second non-threaded cylindrical portion (15) of larger diameter than said first non-threaded cylindrical portion located inwardly from said threaded outer portion to test for a thread ring gage over size minor diameter; a second threaded outer portion (19) located at a second end for testing a "NO GO" thread ring gage; a third non-threaded cylindrical portion (12) of smaller diameter than said second threaded outer portion to test for a thread ring gage undersize minor diameter; and a fourth non-threaded cylindrical portion (18) of larger diameter than said third non-threaded cylindrical portion located inwardly from said threaded outer portion to test for an oversize minor diameter (Fig. 1).

Thomson teaches a thread ring testing device wherein a starting chamfer (the end of 12) is provided on the outward end of said third non-threaded cylindrical portion to facilitate assembly with the thread ring gage.

Thomson teaches the thread ring testing device wherein a groove (14) is provided between said third non-threaded cylindrical portion and said second threaded portion.

Thomson teaches a thread ring gage testing and setting device comprising: one end for testing "GO" ring gages (Fig. 1), a second end for testing "NO GO" ring gages (Fig. 1), means to test for a thread ring gage undersize effective minor diameter (11, 12), means for testing the pitch diameter of a thread ring gage (16, 19), and means to test for a thread ring gage oversize diameter (15, 18).

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Thomson teaches the thread ring gage testing and setting device wherein said end for testing "GO" ring gage is substantially identically configured to said end for testing "NO GO" ring gages (Fig. 1).

Thomson teaches the thread ring gage testing and setting device wherein said means for testing a thread ring gage undersize effective diameter comprises a non-threaded cylindrical portion (11, 12) on each end.

Thomson teaches the thread ring gage testing and setting device wherein said means for testing the pitch diameter of a thread ring gage comprises a threaded portion on each end (16, 19).

Thomson teaches the thread ring gage testing and setting device wherein said means for testing thread ring gage oversize minor diameter comprises a non-threaded cylindrical portion located at the innermost portion of each end (15, 18), and is of greater diameter than said means for testing thread ring undersize effective minor diameter.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 6, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomson in view of Roberts (U. S. Patent No. 4,356,636).

Thomson discloses the thread ring gage testing and setting device as described above in paragraph 7.

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Thomson does not disclose a thread ring gage testing and setting device wherein the outside diameter of the threaded portion varies.

Roberts discloses a thread ring gage testing and setting device wherein the outside diameter of the threaded portion (12) varies (Figs. 1-5 and Col 2, lines 8-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the threaded portion of the device of Thomson, to have the diameter of the threaded portion vary, as taught by Roberts, since threads of varying diameters are often used and therefore, need to be checked for accuracy (Roberts, Col 1, line 64-Col 2, line 5 and Col 2, lines 8-24).

10. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomson in view of Admitted Prior Art found on Page 3, lines 3-11 and Page 4, lines 1-3 [hereinafter APA].

Thomson discloses the thread ring gage testing and setting device and method of testing as described above in paragraph 7 and wherein the device is used to test the acceptability of a thread (Col 1, lines 1-21).

Thomson does not disclose a method of testing specifically including reworking the thread flanks of said ring gage to place said thread flanks within tolerance and rechecking said thread flanks; discarding said ring gages which will not clear said first cylindrical effective minor diameter testing section of said thread setting plug gage; and discarding said ring gages in which said thread ring gage clears said maximum minor diameter testing section of said thread plug gage.

APA discloses a method of testing specifically including reworking the thread flanks of said ring gage to place said thread flanks within tolerance and rechecking said thread flanks; discarding said ring gages which will not clear said first cylindrical effective minor diameter

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testing section of said thread setting plug gage; and discarding said ring gages in which said thread ring gage clears said maximum minor diameter testing section of said thread plug gage (Page 3, lines 3-11 and Page 4, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of testing a thread ring gage of Thomson to specifically include reworking and rechecking the thread flanks, and discarding ring gages which do not meet the acceptable diameter, as taught by APA, since APA teaches that reworking and rechecking or discarding ring gages adds to the efficiency and productivity of a user (Page 3, lines 3-11 and Page 4, lines 1-3) and since Thomson teaches that the method of testing should be used to determine the acceptability of threads (Col 1, lines 1-21).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents disclose thread testing and/or diameter testing devices Green (U. S. Patent No. 4,934,059), Larsen (U. S. Patent No. 4,858,330), Van Horssen (U. S. Patent No. 4,724,618), Herman (U. S. Patent No. 3,064,355), Kohlmeier (U. S. Patent No. 3,057,072), Finley et al. (U. S. Patent No. 2,789,360), Parker et al. (U. S. Patent No. 2,782,521), Greenberg (U. S. Patent No. 2,528,431), Kuebler (U. S. Patent No. 2,514,956), Parr (U. S. Patent No. 2,412,781), Ramsdell (U. S. Patent No. 2,340,428), Almquist (U. S. Patent No. 2,331,882), Hartness (U. S. Patent No. 1,822,028), Bath (U. S. Patent No. 1,654,233), Blood (U. S. Patent No. 1,529,296), Pettibone (U. S. Patent No. 1,339,573), and Weaver (U. S. Patent No. 1,294,004).

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARC
October 28, 2004



Diego Gutierrez
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